U.S. Department of Energy

Performance and Accountability Report

Fiscal Year 2004

APPENDICES

Glossary of Acronyms

****A****

ABWR .....Advanced Boiling Water Reactor
AFCI.....Advanced Fuel Cycle Initiative
AFV .....Alternative Fuel Vehicles
ALRC.....Albany Research Center
Am .....Americium
AMWTP .....Advanced Mixed Waste Treatment Project
ANL-W .....Argonne National Laboratory –West
APEC .....Asian Pacific Economic Cooperation
APP .....Annual Performance Plan
AP600.....Advanced Pressurized Water Reactor 600
ARES .....Advanced Reciprocating Engine System
ARM.....Atmospheric Radiation Measurement
ASC .....Advanced Simulation and Computing Campaign
ASCAC .....Advanced Scientific Computing Advisory Committee
ASCI.....Advanced Simulation and Computing Initiative
ASCR .....Advanced Scientific Computing Research
ATLAS .....A Toroidal LHC Apparatus

****B****

BDMS.....Blend-Down Monitoring Systems
BER.....Biological and Environmental Research
BES .....Basic Energy Sciences
BESAC .....Basic Energy Sciences Advisory Committee
BLS .....Bureau of Labor and Statistics
BNL .....Brookhaven National Laboratory
BOP .....Balance of Plant
BTU .....British Thermal Unit
BWR.....Boiling Water Reactor

****C****

C2 .....Command and Control
CALM .....Capability for Advanced Loading Missions
CANDU.....Canada Deuterium Uranium
CAP .....Corrective Action Plan
CAR .....Cooperative Automotive Research
CBC .....Consolidated Business Center
CBFO .....Carlsbad Field Office
CCPI.....Clean Coal Power Initiative
CD .....Critical Decision
CEBAF.....Continuous Electron Beam Accelerator Facility
CERT .....Council of Energy Resource Tribes
CERTS .....Consortium for Electric Reliability Technology Solution
CF .....Carbon Fibers
CFD .....Computational Fluid Dynamics
CFF.....Container Firing Facility
CHP .....Combined Heat and Power

Cm .....Curium
CMRR .....Chemistry and Metallurgy Research Facility Replacement
CMS .....Compact Muon Solenoid
CO2 .....Carbon Dioxide
COE .....Cost of Energy
COL .....Construction and Operating License
COMETS .....Crude Oil Movement and Event Tracking System
CP.....Charge-Parity
CPS.....Control Performance Standards
CQPR.....Consolidated Quarterly Performance Results
CRADA .....Cooperative Research and Development Agreement
CREM .....Controlled Removable Electronic Media

****D****

DARHT .....Dual-Axis Radiographic Hydrotest
DBT .....Design Basis Threat
DEMP .....Departmental Energy Management Program
DER .....Distributed Energy Resource
DG .....Distributed Generation
DNA.....Deoxyribonucleic Acid
DNS .....Defense Nuclear Security
DOD.....Department of Defense
DOE .....Department of Energy
DP.....Defense Programs
DRAAG.....Design Review and Acceptance Group
DSP.....Defense Support Program
DSW.....Directed Stockpile Work

****E****

ECP .....Electrochemical Plant
EDU .....Engineering Development Units
EECP .....Early Entrance Co-Production Plant
EER.....Engineering Evaluation Release
EERE .....Office of Energy Efficiency and Renewable Energy
EGS.....Enhanced Geothermal System
EIA .....Energy Information Administration
EIPP .....Eastern Interconnection Phasor Project
EIS .....Environmental Impact Statement
EM .....Office of Environmental Management/Environmental Management
EMCAL .....Electro-Magnetic Calorimeter
EMSL .....Environmental Molecular Science Laboratory
EPA.....Environmental Protection Agency
EPR.....European Pressurized Water Reactor
EPRI .....Electric Power Research Institute
ERB-II.....Experimental Breeder Reactor II
ERDS .....Emergency Response Database System
ESnet .....Energy Sciences Network
ESPC .....Energy Savings Performance Contract
EWGPP .....Elimination of Weapons Grade Plutonium Production

F

FCE.....Fuel Cell Energy
FCI .....Facility Condition Index
FE .....Office of Fossil Energy
FEMP .....Federal Energy Management Program
FERC .....Federal Energy Regulatory Commission
FES .....Fusion Energy Sciences
FFMIA .....Federal Financial Management Improvement Act
FFTF.....Fast Flux Test Facility
FIRP .....Facilities and Infrastructure Recapitalization Program
FMFIA .....Federal Manager's Financial Integrity Act
FNAL.....Fermi National Accelerator Laboratory
FSED .....Full-Scale Engineering Development
FUSRAP.....Formerly Utilized Sites Remedial Action Program
FXR.....Flash X-Ray
FYNSP .....Future-Year Nuclear Security Program

G

GAO.....Government Accountability Office
g/bhp-hr .....Grams per Brake-Horsepower-Hour
GHASTLI .....Gas Hydrate and Sediment Test Laboratory Instrument
GHz .....Gigahertz
GPRA.....Government Performance and Results Act
GPS.....Global Positioning System
GSF.....Gross Square Feet

H

H2.....Hydrogen
HEP .....High Energy Physics
HEU .....Highly Enriched Uranium
Hg.....Mercury
HLW.....High-Level Radioactive Waste
HP .....High Pressure
HRIBF .....Holifield Radioactive Ion Beam Facility
HT .....High Temperature
HTHP.....High Temperature-High Pressure
HTS .....High Temperature Superconductivity
HVAC .....Heating, Ventilation, and Air Conditioning

I

IA .....Implementing Agreement
IAEA .....International Atomic Energy Agency
ICBM .....Intercontinental Ballistic Missiles
ICF .....Inertial Confinement Fusion
ICRF.....Ion Cyclotron Radio Frequency
IDW .....I-MANAGE Data Warehouse
IECC.....International Energy Conservation Code
IG .....Inspector General
IGCC .....Integrated Gasification Combined Cycle
I-MANAGE.....Integrated Management Navigation System
INEEL .....Idaho National Engineering and Environmental Laboratory
INL.....Idaho National Laboratory

IOP .....Intensive Operations Period
IPHE.....International Partnership for the Hydrogen Economy
IPIA .....Improper Payments Information Act
IPIS.....Integrated Pit Inspection Station
IPP .....Initiatives for Proliferation Prevention
ISO .....International Standards Organization
ISTC .....International Science and Technology Center
ITER .....International Thermonuclear Experimental Reactor
ITM.....Ion Transport Membrane

****J****
JAERI .....Japan Atomic Energy Research Institute
JASPER .....Joint Actinide Shock Physics Experimental Research
JET .....Joint European Torus
JGI .....Joint Genome Institute
JIP .....Joint Industry Projects

****K****
KW .....Kilowatt

****L****
LA.....License Application
LANL.....Los Alamos National Laboratory
LANSC .....Los Alamos Neutron Science Center
LCFG .....Laboratory for Comparative and Functional Genomics
LEP.....Life Extension Program
LEU .....Low-Enriched Uranium
LHC .....Large Hadron Collider
LIGA .....Lithoraphy Galvanoformung Abformung (German)
LLW .....Low Level Waste
LM .....Legacy Management
LSN .....License Support Network
LWR .....Light Water Reactor
LWST .....Low Wind Speed Turbine

****M****
MARS .....Management and Reporting System
MCFC .....Molten Carbonate Fuel Cell
MCO .....Multi-Canister Overpack
MESA.....Microsystem and Engineering Science Application
MIDCARB.....Midcontinent Interactive Digital Carbon Atlas and Relational Database
MIE.....Major Items of Equipment
MIT.....Massachusetts Institute of Technology
MLLW .....Mixed Low-Level Waste
MOX.....Mixed-Oxide Fuel
MPC&A.....Material Protection Control and Accountability
MPF .....Modern Pit Facility
MRI .....Magnetic Resonance Imaging
MSP .....Managed Staffing Plan
MT .....Metric Tons
MTHM.....Metric Tons of Heavy Metal
MV .....Megavolts
MW .....Megawatt

N

NAAQS .....National Ambient Air Quality Standards
NAEWG .....North American Energy Working Group
NASA .....National Aeronautics and Space Administration
NATCARB .....National Carbon Sequestration Database and Geographic Information System
NCSX .....National Compact Stellarator Experiment
NCTS .....NIF Cryogenic Target System
NE .....Office of Nuclear Energy, Research, and Technology
NEP .....National Energy Policy
NERC .....North American Electric Reliability Council
NERI .....Nuclear Energy Research Initiative
NERSC .....National Energy Research Scientific Computing Center
NESS .....Nuclear Explosive Safety Study
NETL .....National Energy Technology Laboratory
NFRC .....National Fenestration Rating Council
NGA .....Next Generation Computer Architecture
NGNP .....Next Generation Nuclear Plant
NICE3 .....National Industrial Competitiveness through Energy, Environment, and Economics
NIF .....National Ignition Facility
NLC .....Next Linear Collider
NNSA .....National Nuclear Security Administration
NOx .....Nitrous Oxide
NP .....Nuclear Physics
NPR .....Nuclear Posture Review
NRC .....Nuclear Regulatory Commission
NSRC .....Nanoscale Science Research Center
NTS .....Nevada Test Site
NWC .....Nuclear Weapons Council
NWIR .....Nuclear Weapons Incident Response
NWPA .....Nuclear Waste Policy Act

O

OA .....Office of Independent Oversight and Performance Assurance
OCRWM .....Office of Civilian Radioactive Waste Management
ODP .....Ocean Drilling Program
OETD .....Office of Electric Transmission and Distribution
OIT .....Office of Industrial Technologies
O&M .....Operation and Maintenance
OMB .....Office of Management and Budget
OMBE .....Office of Management, Budget and Evaluation
ONT .....Office of National Transportation
ORNL .....Oak Ridge National Laboratory
OSRP .....Off-Site Source Recovery Program

P

PAC .....Physics Advisory Committee
PAR .....Performance and Accountability Report
PART .....Program Assessment Rating Tool
PB-1 .....Inverse Picobarnes
PCD .....Production Control Document
PDCF .....Pit Disassembly and Conversion Facility

PED .....Project Engineering Design
PGF .....Production Genomics Facility
PM .....Particulate Matter
PMA.....President's Management Agenda
PNNL.....Pacific Northwest National Laboratory
Pu .....Plutonium
PV.....Photovoltaic
PWR.....Pressurized Water Reactor

****Q****

QCD.....Quantum Chromodynamics
QMU .....Quantitative Margins and Uncertainties

****R****

RAFR .....Recordable Accident Frequency Rate
RAP .....Radiological Assistance Program
RBMK .....Reactor Bolshoi Moshchnosti Kanalnyi
R&D .....Research and Development
RD&D .....Research, Development, and Demonstration
RDD .....Radiological Dispersal Devices
REM .....Roentgen Equivalent Man
RERTR .....Reduced Enrichment Research and Test Reactor
RF .....Radio Frequency
RHIC .....Relativistic Heavy Ion Collider
RIA.....Rare Isotope Accelerator
RIAR .....Scientific Research Institute of Atomic Reactors (Russian)
RNEP .....Robust Nuclear Earth Penetrator
RREF .....Risk Reduction Efficiency Factor
RTBF .....Readiness in Technical Base and Facilities
RTI .....Russian Transition Initiative
RTO .....Regional Transmission Organization

****S****

SABRS .....Space and Atmospheric Burst Reporting System
SAIDI.....System Average Interruption Duration Index
SBS .....Standard Budget System
SC.....Office of Science
SCDHEC .....South Carolina Department of Health and Environmental Control
SCE.....Sub-Critical Experiment
SciDAC .....Scientific Discovery through Advanced Computing
SECA .....Solid State Energy Conversion Alliance
SGT.....Safeguard Transporters
SLAC .....Stanford Linear Accelerator Center
SLBM .....Sea-Launched Ballistic Missile
SLD .....Second Line of Defense
SMV .....Special Monitoring Visits
SNF .....Spent Nuclear Fuel
SNL .....Sandia National Laboratory
SNO .....Sudbury Neutrino Observatory
SNS.....Spallation Neutron Source
SOFC .....Solid Oxide Fuel Cell
SPR.....Strategic Petroleum Reserve

SRR.....Seismic Research Review
SRS .....Savannah River Site
SSP .....Stockpile Stewardship Program
SSRL.....Stanford Synchrotron Radiation Laboratory
STA.....Secure Transportation Asset
STARS .....Standard Accounting and Reporting System
STS .....Stockpile to Target Sequence
SWSA 4 .....Solid Waste Storage Area 4

****T****

TEF .....Tritium Extraction Facility
TeraOPS.....Trillions of Operations per Second
TFTR .....Tokamak Fusion Test Reactor
TGA .....Thermogravimetric Analyzer
THF .....Tetrahydrofuran
TJNAF .....Thomas Jefferson National Accelerator Facility
TMO.....Transparency Monitoring Office
TPBARS.....Tritium-Producing Burnable Absorber Rods
TPC .....Total Project Cost
TRA .....Test Reactor Area
TRU .....Transuranic
TSTA .....Tritium Systems Test Assembly
TTC .....Transformational Technology Core
TVA .....Tennessee Valley Authority

****U****

UCLA.....University of California Los Angeles
UEIP.....Ural Electrochemical Integrated Plant
UP.....University Program
UREX .....Uranium Extraction Plus
USEC .....United States Enrichment Corporation
USG .....United States Government
USIC.....United States Industry Coalition

****V****

VNIIEF.....All-Russian Scientific Research Institute of Experimental Physics (Russian)
VVER .....Water-cooled, Water-moderated Energy Reactor (Russian)

****W****

WIPP .....Waste Isolation Pilot Plant
WIR .....Waste Incidental to Reprocessing
WMD .....Weapons of Mass Destruction

****X****

****Y****

****Z****

This page intentionally left blank.

Improper Payments Information Act Reporting Details

1. Risk Assessment & Program Inventory

Federal agencies are required to review all programs and activities they administer and identify those which may be susceptible to significant erroneous payments. Based on these reviews, each agency must develop projections of annual improper payment rates and establish a program inventory to include programs subject to "significant risk."

After completing a review of all Departmental payments, it was determined that DOE does not have any payment programs subject to significant risk. The Department does not have any of the major benefit or entitlement programs normally associated with high risk of improper payments, and the review indicated that all payments remitted by, or on behalf of DOE, were similar in character and risk.

The Department's overall improper payment rate is .09 percent, well below the 2.5 percent risk threshold. Because no Departmental programs are subject to significant risk and all payments are similar in character, it was determined that a single Departmental rate, inclusive of all DOE elements, would be used to measure and monitor improper payment risk.

While the Department has no specific programs required to be separately identified in a "Program Inventory," since FY 2002, all of our administrative payments have been grouped and tracked in four major categories. These categories are: vendor/contractor, travel, payroll[1] , and other. Erroneous payment data for each of these four categories is collected and reported quarterly by each of the Department's Federal payment centers including our power marketing administrations and the Federal Energy Regulatory Commission, and by each of our major facilities management contractors that operate our laboratory and production facilities.

2. Statistical Sampling Methodology

While the Department has no specific program inventory subject to the statistical sampling requirement, statistical sampling is utilized at Departmental payment sites to project erroneous payments in each of the four categories identified above. Quarterly, each payment site identifies its erroneous payment rates by reviewing a statistically valid sample[2] of payment activity and projecting results to the universe of payments or by evaluating data from local systems that have the capability of tracking and reporting on actual erroneous payment activity for a given period. In addition, payment sites may use a variety of other tools and techniques for reviewing erroneous payments including payment audits, data mining and the use of audit sampling software.

3. Corrective Action

The Department has maintained its improper payment percentage at an extremely low level, well below the 2.5% threshold for at-risk programs. Based on this level of performance, no specific Departmental corrective actions have been identified. However, the Department continues to monitor payment activity and requires individual payment sites whose local rate exceeds 1/10 of 1 percent to identify and track corrective actions to reduce the rate. Sites who approach or exceed 1 percent must prepare a formal corrective action plan to be tracked centrally at Headquarters. Currently the vast majority of sites are below these targets. The sites above target have identified appropriate corrective actions.

[1] Due to the outsourcing of the Department's payroll function, erroneous payment data for Federal payroll activities is not available pending a determination by our service provider on how to satisfy the erroneous payment reporting requirements for all their customer agencies. Federal payroll payments generally represent about 2.8% of total payments made by the Department.

[2] Departmental guidance requires samples to provide a 95 percent assurance level.

4. Improper Payment Outlook

As noted in the chart below, the Department's extremely low improper payment rate minimizes the Department's opportunities for future reductions and increases the likelihood of rate fluctuations as very small variations in erroneous payment dollars drives more significant changes when viewed as a rate.

Improper Payment Reduction Outlook
FY 2003 – FY 2007 ($ in millions)

Class of Payment/Program	FY 04 Outlays/Payments	FY 04 IP%	FY 04 IP$	FY 05 IP%	FY 06 IP%	FY 07 IP%
Payroll	$ 7,320	.05	3.8	<.25	<.25	<.25
Travel	$ 363	.17	0.6	<.25	<.25	<.25
Vendors	$15,604	.10	15.8	<.25	<.25	<.25
Other	$ 352	.01	0.1	<.25	<.25	<.25

Note: Federal payroll not included due to outsourcing of this function. See footnote 1 on page one of this appendix.

5. Recovery Auditing

P.L. 107–107, "National Defense Authorization Act for FY 2002," requires agencies that enter into contracts with a total value in excess of $500 million in a fiscal year to carry out a cost effective program for identifying overpayments to contractors, and for recovering amounts overpaid. OMB memorandum M-03-07, "Programs to Identify and Recover Erroneous Payments," requires agencies to review their contractor payments for errors resulting in overpayments (recovery audit), take action to recover those overpayments, and report the results of these activities to OMB on an annual basis.

In March of 2004, the Department issued "Implementation Guidance for Recovery Audit Programs" to ensure well coordinated recovery auditing activities across the DOE complex. Various tools and techniques were utilized in performing recovery audits including statistical sampling, data mining, payment audits and hiring of a recovery auditing contractor[3]. The data resulting from our recovery audit activities is summarized above.

Recovery Auditing Statistics
FY 2003 ($ in millions)

Contractor Payments Reviewed	$ 11,944
Contractor Overpayments Identified	$ 6.0
Overpayments Recovered	$ 6.0
Overpayments Pending Recovery	$ 0.0
Overpayments Not Recoverable	$ 0.0
Total Cost of Recovery Audit Program	$ 0.4
Departmental Costs	$ 0.4
Recovery Auditing Contractor Costs	$ .02

[3] A commercial recovery audit firm was utilized at one of the Department's major facilities management contractors. Overall the audit identified minimal overpayments and the total cost of identification and recovery exceeded the amounts recovered, supporting the Department's initial assessment of limited risk and our approach of in-house recovery activities.

6. Management Accountability

The Department has established a specific "Proud-to-Be" goal for the PMA related to monitoring improper payment activity. Specifically, we have committed to taking actions to reduce the erroneous payment percentage at sites with rates exceeding 1/10 of 1 percent. Individual payment sites whose local rate exceeds this target are required to identify and track corrective actions to reduce the rate. Sites who approach or exceed 1 percent must prepare a formal corrective action plan to be tracked centrally at Headquarters. Senior management performance plans are tied to accomplishment of PMA objectives and, therefore, a direct link has been established to foster an environment of management accountability.

7. Information systems

DOE believes its information systems are adequate for maintaining improper payment rates at targeted levels consistent with sound financial management.

8. Legislative barriers

The Department has identified no legislative barriers that limit our ability to minimize improper payments.

9. Additional Comments

None

We welcome your comments on how we can improve the Department of Energy's Performance and Accountability Report.

Please provide comments and requests for additional copies to:

beverly.pershing@hq.doe.gov

or (301) 903-2551

Printed with soy ink on recycled paper

www.energy.gov